REASONS FOR ALLOWANCE

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the PTO-892 were cited in the parent US case.

The following is an examiner's statement of reasons for allowance: the prior art of record considered as a whole fails to teach or suggest either:

1) a disk calibration and search method in a disk drive, comprising the steps of: positioning a data reading pickup across to a first position on a disk; jumping the pickup in a predetermined direction across tracks on the disk; counting the number of tracks detected during the jumping step; **calculating a unit track number of the disk per a single movement of a driving means for jumping the pickup and calculating an average pitch between the tracks in accordance with the calculated unit track number**; and determining a moving amount for controlling the driving means to jump the pickup from a current position to a target track, as argued in the remarks filed July 22, 2004; or

2) a disk calibration and search method for a disk drive having a disk mounted therein, a frequency generator for generating a pulse used to detect an amount of rotation of a sled motor installed at an end of a shaft of a sled motor, an optical sensor installed adjacent the frequency generator for detecting rotation of the frequency generator, a pickup for reading data and detecting tracks on the disk, the disk being rotated by a spindle motor, drive means for moving the pickup, a microprocessor for controlling the disk drive, a short-jump controller for controlling a short jump of the pickup in accordance with a short jump control command from the microprocessor, and a program memory for storing various data used for reproducing information from the disk, the method comprising steps of: jumping the pickup to a first position on the disk; jumping the pickup from the first position towards a second position on the disk; counting tracks detecting by the pickup when jumping towards the second position; **counting pulses generated by the frequency generating means while jumping the pickup towards the second direction to obtain a summed track number; stopping the step of counting tracks when the step of counting pulses counts a predetermined number of pulses; dividing the summed track number by the predetermined number of pulses to obtain a frequency generator track number; storing the frequency generator track number in the program memory; and searching for a target track on the basis of the stored frequency generator track number**; or

3) a method in a disk drive, comprising the steps of: activating a motor moving a data reading pickup from a first track to a second track for a period of time; counting a first number of tracks during moving of the data reading pickup; and **determining a unit track number by dividing the number of tracks by the period of time**; or

4) a disk calibration and search method in a disk drive, comprising the steps of: positioning a data reading pickup across to a first position on a disk; jumping the pickup in a predetermined direction across tracks on the disk; counting the number of tracks detected during the jumping step; **calculating a unit track number of the disk per a single movement of a driving means for jumping the pickup**; and determining a moving amount for controlling the driving means to jump the pickup from a current position to a target track, as argued in the remarks filed July 22, 2004; or

5) a disk calibration and search process, comprising: making a count of a number of tracks crossed when a pickup is jumped to a first position and moved radially from the first position during generation of a selected number of pulses; **determining an unit track number in dependence upon a relation between the count and the selected number; determining an average pitch between the tracks in dependence upon the unit track number; and determining a moving amount to shift the pickup between a current position on the disk and a target track, in dependence upon the average pitch**; or

6) a disk drive, comprising: a motor; a pickup oriented to make a count of a number of tracks on a memory disk crossed when the motor jumps the pickup to a first position on the disk and moves the pickup radially from the first position in response to application of a selected number of pulses to the motor; and **a controller determining an unit track number in dependence upon a relation between the count and the selected number, determining an average pitch between the tracks in dependence upon the unit track number, and determining a moving amount to shift the pickup between a current position on the disk and a target track, in dependence upon the average pitch**; or

7) a disk drive manufacturing process, comprising: selecting a motor; mounting a pickup oriented to make a count of a number of tracks on a memory disk crossed when the motor jumps the pickup to a first position on the disk and moves the pickup radially from the first position in response to application of a selected number of pulses to the motor; and making an operational connection between a controller and the motor and the pickup, with **the connection enabling the controller to determine a unit track number in dependence upon a relation between the count and the selected number, determine an average pitch between the tracks in dependence upon the unit track number, and determine a moving amount to shift the pickup between a current position on the disk and a target track, in dependence upon the average pitch**; or

8) a disk calibration and search process, comprising: moving a pickup radially from a track on one extremity of the disk to a track on a radially opposite extremity of the disk; **beginning a count of pulses with an edge of a plurality of pulses generating during the movement; making a count of a number of tracks crossed during the movement; and determining a track number in dependence upon a relation between the count of the number and the count of pulses**; or

9) a disk calibration and search process, comprising: moving a pickup to a location on the disk and reading from the disk a current position of the pickup on the disk while the pickup is at the location; establishing an initialized value by determining a number of tracks lying between the location and a designation of a target track; characterizing relativity of a movement of the pickup from the location to the target track as one of a longer jump and a shorter jump; when the movement is characterized as a shorter jump, moving the pickup in conformance to the shorter jump and making a determination of whether the pickup has reached the target track; **when the movement is characterized as a longer jump, establishing an adjusted value when the target track corresponds to an addition of one to the initialized value, and after moving the pickup in correspondence to a pulse value obtained by dividing the number of tracks by the adjusted value, making the determination of whether the pickup has reached the target track; when the movement is characterized as a longer jump and the target track does not correspond to the addition, and after moving the pickup in correspondence to a pulse value obtained by dividing the number of tracks by the initialized value, making the determination of whether the pickup has reached the target track; and establishing the initialized value again when the determination indicates that the pickup has not reached the target track after the moving of the pickup**. (**bold/underlined** language emphasized)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Paul Huber at telephone number 571-272-7588.

/Paul Huber/
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pwh
March 6, 2010